

Wisconsin Department of Agriculture, Trade &amp; Consumer Protection

# Wisconsin Pest Bulletin

PO Box 8911 • Madison, WI 53718 • Phone 1-800-462-2803 • Fax: 608-224-4656

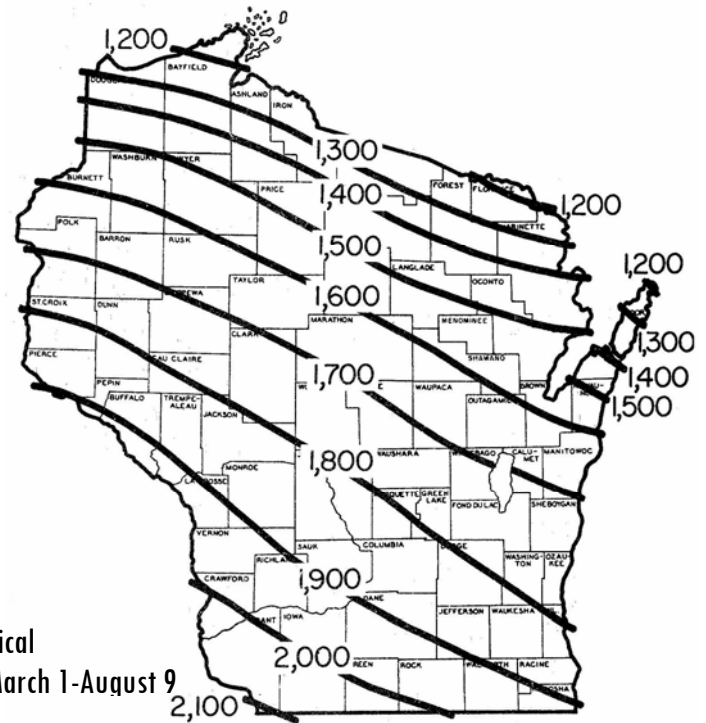
Your weekly source for crop pest news, first alerts, and growing season conditions for Wisconsin



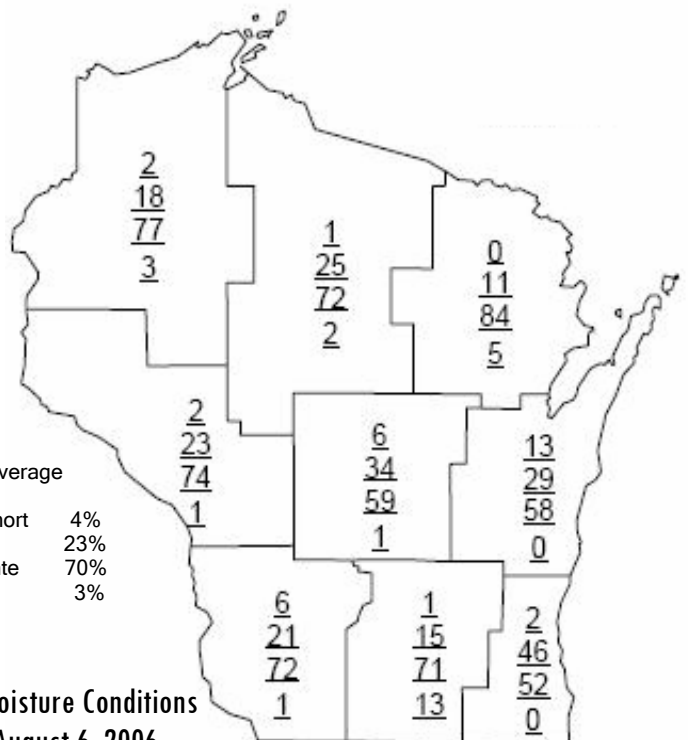
## Weather and Pests

Early August weather conditions were mild, sunny and generally favorable for crop development and fieldwork. After a prolonged heat wave, temperatures returned to a more comfortable range with daytime highs in the 70s and 80s and evening lows in the 50s and 60s. Crops regained their respective shades of green following the plentiful amount of rainfall received last week and dormant alfalfa has resumed growth.

Activity of a few familiar late season pests escalated sharply in the past week. An extremely heavy flight of corn earworm moths is in progress in southern and central Wisconsin, and corn rootworm beetle pressure is intense in many corn fields with green silks. Sweet corn growers are advised to be on high alert for earworm infestations in the week ahead.



Historical  
GDD March 1-August 9



State Average

Very Short 4%  
Short 23%  
Adequate 70%  
Surplus 3%

Soil Moisture Conditions  
as of August 6, 2006

## Growing Degree Days through 8/10/06 were

	GDD 50F	5-yr Ave	Sine 48F	40F
Dubuque, IA	2012	1976	1958	3211
Lone Rock	1947	1900	1877	3124
Beloit	2095	1972	2004	3335
Madison	1901	1877	1814	3078
Sullivan	1934	1878	1844	3148
Juneau	1825	1836	1789	3011
Waukesha	1827	1805	1770	3022
Hartford	1811	1787	1757	3002
Racine	1797	1745	1752	2995
Milwaukee	1807	1724	1736	3003
Appleton	1839	1698	1744	3037
Green Bay	1723	1575	1713	2894
Big Flats	1914	1812	1755	3098
Hancock	1880	1645	1754	3057
Port Edwards	1922	1729	1772	3120
La Crosse	2159	1996	1965	3436
Eau Claire	2104	1866	1943	3367
Cumberland	1848	1623	1790	3018
Bayfield	1488	1261	1483	2553
Wausau	1708	1562	1641	2829
Medford	1727	1524	1671	2856
Crivitz	1653	1488	1619	2794
Crandon	1536	1413	1482	2588

## Alert

**Corn earworm** - Growers of sweet corn in the southern and central districts may soon expect severe corn earworm infestations if susceptible corn is not treated with timely and effective insecticide applications. An extremely heavy flight of moths was documented at most pheromone trapping sites in the last week (August 4-10). Captures of 210 moths per night for five consecutive nights were reported at Evansville, and counts of 100<sup>+</sup> moths per night were reported at Arlington. Weekly total moth catches ranged from 7-1,280 moths. Expect each female of this nocturnal moth species to scatter 1000<sup>+</sup> eggs into the silks of corn ears and egg hatch to take place in about one week. As the end of summer approaches, corn earworm larvae may become abundant in untreated sweet corn fields. Earworms are also likely to be found in the ears of late-planted field corn, but to a lesser extent.

Sweet corn fields should be checked immediately and an insecticide applied and reapplied every 2-5 days (or every 100 GDD) until silks turn brown. Pheromone trap counts for the period of August 4-11 were: Cashton 580, Chippewa Falls 138, Coon Valley 142, Evansville 1,280, Hancock, Janesville, Lancaster 491, Manitowoc 257, Marshfield 294, Mazomanie 222, Reedsburg 35, Sparta 79, Rochelle 48, Sturtevant 680, Sun Prairie 290, Wausau 7, and West Arlington 147. For corn earworm control recommendations visit <http://cecommerce.uwex.edu/pdfs/A3655.PDF>.



Fourth instar corn earworm larva

Krista Hamilton DATCP

## Looking Ahead

**Corn rootworm beetle** - Adults are very active and numerous around lights at night and on a great variety of flowering plants, in addition to corn. An annual survey to assess beetle populations is in progress in southern and central Wisconsin and preliminary observations this week indicate the population is reasonably high. Corn rootworm beetle counts were heaviest in younger fields with green silks and in fields that exhibited uneven growth (partly fresh silks, partly brown silks). The average of the number of corn rootworm beetles per plant by district for the period of August 4-11 was as follows: southwest 2.3 (range of 0.1-11.9 crw per plant),

south central 1.7 (range of 0-8.1 crw per plant), west central 1.4 (range of 0.7-3.5 crw per plant), central 0.2 (range of 0.1-0.5 crw per plant). A count of 1.0 or more beetles per plant indicates the potential for larval problems in corn next season. Visit the **CORN** section for preliminary survey results by county.

**Corn leaf aphid** - High populations were noted on some plants within south central corn fields. Dense colonies were spotty, and not all of the plants in the fields surveyed had heavy infestations. About 15-35% of the plants in the Columbia and Dodge Co. fields visited had populations above 100 aphids per plant concentrated on the tassels and in the ear leaves. Surveying to assess potential damage should generally be concentrated earlier in the season, when corn is in the late whorl to early tassel stage, but recent examinations of corn suggest scouting would still be beneficial. Sample 50 plants consisting of 10 adjacent plants in five locations with reach field. Treatment is warranted when 50% of the plants have colonies of over 50 aphids per plant.

**European corn borer** - A modest increase in corn borer moth activity was indicated in black light trap catches and egg laying continues in susceptible crops. Continue to scout for second generation larvae in the week ahead. The treatment window for second generation corn borers has closed in the west central district, but remains open in other areas until 2,100 GDD (base 50F) have been reached.

**Dingy cutworm** - Unusually high counts of 226 and 267 dingy cutworm moths were noted for the second week at the Marshfield and Wausau black light trapping sites. Significantly lower captures were also reported at locations in southern and northwest Wisconsin, but the heaviest flight activity seems to be limited to the central district. Growers of forages, potatoes, tomatoes and many other susceptible crops in Central Wisconsin are advised to watch for potentially damaging larval feeding later this month.

**Fall armyworm** - Roughly 2% of the plants in a Columbia Co. corn field were infested with fall armyworm larvae, despite no adults having been captured in black light traps this season. This sighting serves as a good reminder to watch for localized infestations of late season pests that sometimes fall under the insect monitoring radar.

**Soybean aphid** - A statewide survey to assess peak soybean aphid densities in 183 soybean fields from the R2-R4 development stages has been completed. Survey results show that 96% of Wisconsin soybean fields did not have economic populations of aphids this season, while 4% of fields surveyed developed populations above the threshold of 250 aphids per plant. Although a vast majority of the state's soybeans escaped injury and the need for foliar sprays, some fields should still be watched closely through August. Aphid densities have continued to build slowly over the past two weeks, and susceptible, late-planted fields may require treatment. Do not treat fields at R6 or later.

## Insect Migration into Midwest Forecast

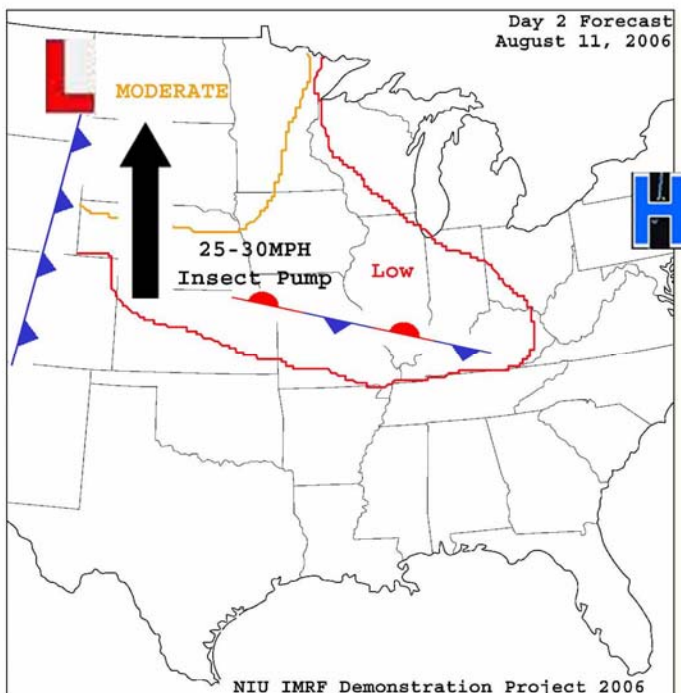
*The following insect migration forecast was developed specifically for migration of corn earworm (CEW), but is*

applicable for all other migratory insects in the Midwest as well, such as the potato leafhopper and armyworm. Forecasts and maps are provided by Mike Sandstrom and Dave Changnon, Department of Geography, Northern Illinois University DeKalb, IL 60115

#### SHORT-TERM DAY 2 (FRIDAY AUGUST 11 NOON TO SATURDAY AUGUST 12 NOON):

**Relative Risk of Insect migration into the Midwest: LOW to MODERATE (10-20%):** greatest risk area is north of I-80 west of I-35, including northwestern Iowa, western Minnesota, northern Nebraska, and the Dakotas. Lower risks are found across the rest of the Midwest mainly south of I-94 and west of I-75.

Low pressure is expected to continue to develop over eastern Montana or the northwestern Dakotas and begin to move to the northeast into southern Canada by the end of this forecasting period. Showers and thunderstorms (potential insect drop zones) will be possible ahead of the low and attendant cold front. With relatively strong low-level southerly winds expected to develop at night across the Plains from Nebraska/Kansas northward and expected precipitation, a Moderate risk of insect migration is forecast for areas mainly north of I-80 but west of I-35. A lower risk of insect migration is forecast for the rest of the Midwest mainly along and south of I-94 for more scattered precipitation areas that may develop along the weakening frontal boundary, but details on where the most concentrated areas of precipitation may develop is very uncertain and is highly dependent on what occurs across the area today.

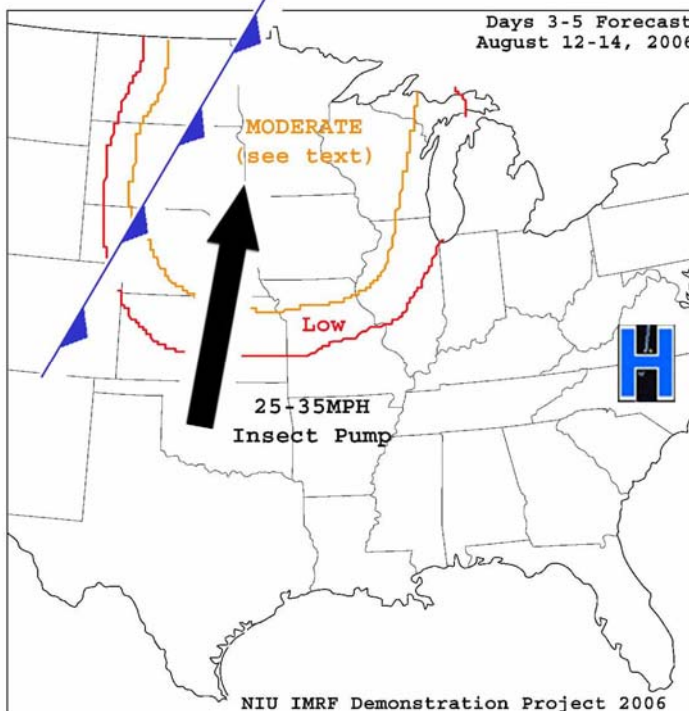


#### LONG-TERM DAYS 3 TO DAY 5 (SATURDAY AUGUST 12 NOON TO MONDAY AUGUST 14 NOON):

**Relative Risk of Insect migration into the Midwest: LOW to MODERATE (10-25%):** greatest risk area is north of US 36 and west of I-55 but east of US 83, including the eastern Dakotas, Nebraska, Iowa, Minnesota, Wisconsin,

northwestern Illinois, and far northern Missouri. On Day 3, the greatest risk area will be mainly along and west of I-29, with the risk shifting east to between I-35 and US 81 by Day 4, and along/east of the I-35 corridor to the Mississippi River vicinity by Day 5.

Low pressure will continue to move east/northeast into Canada during this forecasting period with a trailing cold front also advancing to the east through the Plains and upper Mississippi River valley. High pressure will be located over the eastern United States, so southerly winds will be present to the west of the high and to the east of the frontal boundary. Showers/storms are expected to develop on a daily basis along the frontal boundary, especially late in the day and during the overnight hours. The weather pattern appears to be setting up into a very favorable pattern for insect migration into the Midwest this weekend into early next week. Additionally, relatively strong nocturnal low-level southerly winds are expected, so the opportunity for insects to migrate quickly northward from source regions along and south of I-80 will be present. Therefore, we are forecasting a higher end Moderate risk of insect migration for the northern and western Midwest for this forecasting period. We will continue to monitor conditions in the next 24 hours and provide an update to the forecast tomorrow.



## Corn

**Corn rootworm beetle** - The annual survey underway in areas of southern and central Wisconsin found variable, but generally high populations of corn rootworm beetles in the past week, depending on the development stage of field corn examined. Counts taken in mature corn fields with brown silks were low for the most part, while counts in younger fields with green silks were commonly very high. As a majority of fields approach maturity, the younger, late-planted fields are proving to be highly attractive to corn rootworm beetles. Additionally, the pattern of uneven growth more common in some south central and east central fields this season

appears to be worsening the impact of beetles. While a majority of individual fields may have reached maturity (evidenced by the presence of brown silks), the younger plants in those fields were luring the economic numbers of beetles into what would otherwise be an uninviting setting. The numbers of beetles documented in these partially pollinated, partially mature fields were more than high enough to lay damaging numbers of eggs. A total of 8% of the fields surveyed since August 2 displayed uneven growth, with both pollinated and mature plants, 29% of the fields were pollinated, 56% of the fields surveyed were mature (brown silk, cob full size), and 5% were at the soft dough development stage. Survey results for the period of to August 2-10 are reported in the table below:

County	Ave no. CRW beetles per plant <sup>1</sup>	Range	No fields surveyed
Adams	0.1	0.1 - 0.2	2
Columbia	1.1	0.0 - 2.8	8
Dane	2.1	0.5 - 5.6	6
Dodge	3.2	0.8 - 8.1	6
Grant	1.8	0.2 - 5.4	9
Green	1.3	0.7 - 2.4	7
Jefferson	1.6	0.5 - 3.3	6
Juneau	0.3	0.1 - 0.5	2
Lafayette	4.4	0.3 - 11.9	5
Richland	0.3	0.2 - 0.4	3
Rock	0.7	0.4 - 1.2	6
Sauk	2.2	0.3 - 4.5	4
Vernon	2.9	1.0 - 4.8	2

<sup>1</sup>Average based on number of corn rootworm beetles per 10 plants

as high as expected, but this may change by next week as more mature larvae pupate. According to the degree day model for European corn borer, peak emergence of the second flight of moths should have occurred across most of the state. The treatment window for second generation corn borers remains open until 2,100 GDD (base 50F) have been reached.

**Corn leaf aphid** - Aphids are numerous in fields in many sections of the state, and serious build-up on tassels and ear leaves on some plants has been observed. As high as 35% of these plants had high populations and mild injury was observed in three of eight Columbia Co. fields. In two of six Dodge Co. fields surveyed, 15-20% of the plants were infested with economic corn leaf populations. Consider treatment for control of corn leaf aphid when 50% of the plants have colonies in excess of 50 aphids per plant prior to tassel emergence. Insecticides registered for control for European corn borer and corn earworm will also effectively control this aphid species.



Corn leaf aphids

Krista Hamilton DATCP

**Western bean cutworm** - Declining western bean cutworm moth counts at most trapping sites for the second week in a row suggests that egg laying has slowed substantially, and the population is now in the larval stages. Continue to scout for larvae in corn ears. Multiple larvae per ear are a strong indicator of the presence of bean cutworm and not the corn earworm. In an Illinois field, as many as five larvae were found in a single ear in recent days. Although it is an unlikely that economic populations will be detected in Wisconsin this season, consider insecticide treatment when 8% of the plants have egg masses on the leaves or young larvae feeding in tassels. In areas of the state where peak moth flight was registered more than two or three weeks ago, larvae are past the development stage where an insecticide application would be effective.

**Corn leaf blights** - Every August, as certain as the swallows return to Capistrano, the corn leaf blights appear in Wisconsin corn. Generally, the fungal diseases don't appear until after silking, making economic injury uncommon. Humid conditions favor the development of most leaf blights. Most hybrid corn varieties are selected for some resistance to a wide range of leaf blights before being released; in field corn, leaf blights are rarely economic. Sweet corn, with a narrower



Western corn rootworm beetle

Krista Hamilton DATCP

**European corn borer** - Second flight moth activity increased at about half of the black light trapping locations during the last reporting period (see black light trap report). Limited observations in field corn on August 8,9, and 10 in Columbia and Dodge Cos. showed 9% of the borers were in the 3<sup>rd</sup>-4<sup>th</sup> instars, 45% in the 5<sup>th</sup> instar, and 46% had pupated (most of these had emerged). Black light trap catches have not been

genetic base and a breeding process complicated by the need to satisfy a host of quality characteristics, is often susceptible to various leaf blights, though fungicide treatment of sweet corn is generally reserved for controlling rust.

The most common leaf blights found in Wisconsin corn are:

**Northern corn leaf blight (*Exserohilum turcicum*)** - NCLB is characterized by long cigar-shaped lesions, often gray to tan. Lesions can cover a considerable amount of leaf area if infection occurs before tasseling, leading to yield loss due to disruption of photosynthetic capacity.

**Eyespot (*Aureobasidium zeae*)** - Eyespot is an interesting case of adaptation, as the disease appears to be more prevalent as corn reaches the northern edge of its common range. The disease is characterized by small round lesions, hence the common name. Like many other corn leaf blights, eyespot is favored by no-till systems. This disease appears to be on the increase in Wisconsin.

**Northern corn leaf spot (*Bipolaris zeicola*)** - Also known as carbonum leaf spot, northern corn leaf spot appears to be favored by no-till systems. A minor player on the leaf blight team, carbonum is characterized by narrow linear lesions, generally less than 1/4 inch wide and 3/4 inch long. Yield loss from *B. zeicola* is uncommon.

**Gray leaf spot (*Cercospora zea-maydis*)** - First found in the U.S. in 1925 gray leaf spot has spread throughout much of the eastern part of the country. Favored by humid conditions and no-till systems, lesions of gray leaf spot are easily identified by the almost rectangular shape, with squared-off ends. Considerable work has been done with breeding for resistance to this disease, but those efforts may be complicated by the presence of strains or races of the disease differing in their response to host resistance.

**Southern corn leaf blight (*Bipolaris maydis*)** - Famous for the 1970 Race T (Texas male sterile cytoplasm) epidemic, southern corn leaf blight does occur in Wisconsin on occasion, though not as frequently as the other fungal diseases. SCLB lesions may be variable in shape, depending upon the host, but often have a dark red or purple border. As with the other leaf blights, genetic resistance is the best control method available.

## Forages

**Potato leafhopper** - Populations remained high this week in untreated, uncut alfalfa fields and at porch lights. Counts in the south central counties averaged about 3.4 per sweep but ranged from 0.7-16.3, while numbers in the west central counties averaged about 2.1 per sweep but ranged from 0.4-6.6 per sweep. Populations observed at a Columbia Co. porch light were too high to venture an estimate. Reproduction seemed to show no sign of the slowing this week. However, somewhat cooler evening temperatures in the forecast may limit nighttime activity in the not so distant future. Alfalfa fields should be monitored through fall.

**Redlegged grasshoppers** - Redlegged grasshoppers in many alfalfa fields are relatively numerous, as they are along fencerows and roadsides. They are rapidly approaching

maturity and while some already have wings, more soon will develop wings. Migration to new alfalfa seedings is likely to occur in the near future.

## Soybeans

**Soybean aphid** - Results of an annual survey of 183 R2-R4 stage soybean fields carried out from July 12 to August 9 indicate aphid populations did not build to economic levels in most Wisconsin soybean fields. The survey found 96% (175 of 183 fields) of the soybean fields examined had noneconomic aphid populations, while 4% (8 of 183) had soybean aphid populations in excess of the action threshold of 250 aphids per plant. Based on 2006 survey, 85% of the soybean fields averaged fewer than 100 aphids per plant, 10% of the fields examined averaged 100-250 aphids, and 4% averaged 251-2,000 aphids per plant. A total of 58% of the fields surveyed were at the R2 development stage (full bloom), 20% were at R3 (beginning pod), and 22% were at R4 (full pod). The soybean aphid densities recorded this season are comparable to 2005 densities in most districts, higher than those documented in 2004 (the lightest aphid year on record), and considerably lower than the record aphid densities detected in 2003. Final survey results are summarized by statistical reporting district on page 10.

**Bean leaf beetle** - Second generation beetles are active in southern Wisconsin soybean fields. Defoliation in some Columbia Co. fields ranged from 5-15% and populations of 1-7 beetles per 10 sweeps were obtained in the fields checked. While the first generation was relatively inconsequential, the same may not hold true for this typically more destructive generation of leaf and pod feeders. Now that the soybean aphid threat has subsided in many areas, scouting efforts for bean leaf beetles should be intensified.

## Corn Earworm Pheromone Trap Counts

	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	11-Aug
<b>Southwest</b>								
Lancaster				127			364	
Reedsburg				35				
<b>South central</b>								
Mazomanie								222
Rochelle, IL	2		11	15	11	9		
Sun Prairie	58	58	58	58	58			
Evansville	50+	210	210	210	210	110	120	170
Arlington				100	100	100	125	
West Arlington				147				
<b>Southeast</b>								
Sturtevant							680	
Janesville	6			1		6		
<b>West central</b>								
Sparta			0	75			4	
Coon Valley	11	13	39	9	7	22	41	
Cashton			280			300		
New Richmond								
Chippewa Falls							138	
<b>Central</b>								
Wausau	1	5		5			1	
Marshfield				254			40	
<b>East Central</b>								
Manitowoc			231			26		

## Fruit

**Apple maggot** - Adult apple maggot emergence continued this week with captures reported at 11 trapping sites (see Apple Insect Trapping table below). Treatments for control of this orchard pest should be applied as long as trap counts remain above the action threshold of one fly per unbaited trap per week, or five flies per baited trap per week. Egg laying is likely to soon begin declining now that peak emergence has long passed. Expect fly activity to continue through 2,800 GDD (base 50F).



Apple maggot fly

Jack Kelly Clark

**Codling moth** - Codling moth continues to be problematic in many Wisconsin orchards. In general, where control strategies have been effectively timed, injury is minimal. However, in orchards where sprays were mistimed or inadequate, apple trees have developed moderate to heavy infestations. Trap counts for the period of August 4-11 show above-threshold trap catches at eight of the reporting sites. Any orchard that continues to register counts above five moths per trap per week is a good candidate for codling moth control.

**Note:** The codling moth look-alike *Proteoteras* has made its second appearance of the season in some southwestern orchards. Be sure to examine trap liners closely to avoid taking any unnecessary control measures based on imprecise moth counts.

**Pheromone lures** - Some apple insect trapping cooperators have discovered that the 4-6 week life span of *Trece* pheromone lures is not as long as advertised. John Aue noted counts of the target pests increased substantially each time a new lure was installed, regardless of general population dynamics. Cooperators should replace lures every four weeks. Those needing additional lures should call Krista Hamilton at 1-800-462-2803.

## Vegetables

**European corn borer** - Fresh Vegetable IPM Coordinator Karen Delahaut warns that corn borer problems on beans tends to occur during warmer than normal years (this year, for

instance), and advises that both beans and sweet corn should be checked for injury. Look for young corn borer larvae to feed on the leaves, buds, or flowers before growing large enough to bore into bean pod and stems. Growers of beans are strongly encouraged to follow black light trap catches at the nearest trapping location. A nightly catch of 10 or more moths for three consecutive nights indicates treatment is warranted in susceptible beans (14 days prior to harvest). A nightly catch of 100 more moths indicates a reinfestation flight is occurring, feeding pressure is high, and treatments should be made every 5-7 days until 14 days before harvest. As noted in the Looking Ahead section, the treatment window for second generation has closed in parts of the west central and far south central districts (near Beloit). Treatments in beans and sweet corn can be made in other areas of the state until 2,100 GDD (base 50F) accumulate.

**Corn earworm** - Most corn earworm pheromone traps placed around the state registered high counts again this week. The sharp increase in numbers began mid- to late last week and has accelerated through this week. Some totals peaked at over 600 moths. Egg laying is underway and will continue in the weeks ahead.

Corn earworm moths lay their eggs on leaf hairs or corn silks. Eggs hatch in just three to four days. Females can lay anywhere between 500 and 3000 eggs during a season. Eggs are yellow in color at first and with time change to a grayish color. When larvae hatch, they move around until finding a suitable feeding site, usually on silks, leaves, tassels and ears. At first, larvae may feed with several others, but eventually they become more aggressive and cannibalistic. This explains why surveyors generally see to just one larvae per ear when scouting. Research in sweet corn from the University of Minnesota indicates that even low levels of larvae per ear can equate to relatively high percentages of ears infested. To read more on this research, visit <http://www.vegedge.umn.edu/MNFruit&VegNews/Vol3/vol3n7.htm>.



Corn earworm larva

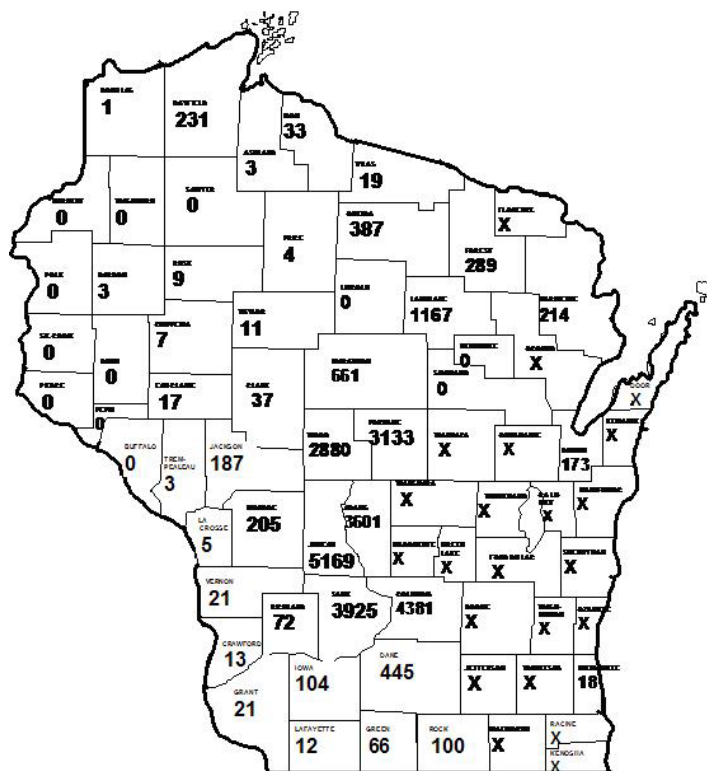
Krista Hamilton DATCP

Fresh market sweet corn in Wisconsin is most susceptible to damage from mid-August to early September. Larval injury from feeding in the tips of ears and kernels results in fewer marketable cobs. Also, consumers are not inclined purchase the flawed ears and processing plants must remove damaged tips prior to processing.

Pheromone traps and black light traps can both be used as a scouting tool. In sweet corn, pheromone trap catches of just 5 to 10 moths per night for three consecutive nights can indicate that treatment is warranted. Many pheromone traps in our corn earworm trapping network have well surpassed this treatment threshold in the past week. Several non-chemical and chemical treatment options are available. See extension publication A3655, *The Corn Earworm*, by K.A. Delahaut and J.L. Wedberg at <http://s142412519.onlinehome.us/uw/pdfs/A3655.PDF> for more details.

## Gypsy Moth

**Gypsy moth trapping program** - Trappers are finishing up pheromone trap checks for the season. As of August 9, trappers reported a total of 27,627 male gypsy moths. Counties in the central part of the state registered the highest moth numbers (see map). Trappers have been spot checking to determine when moth flight has ended. Their reports indicate that the majority of the flight is over in the southern part of the state. Recent hot weather has caused the life cycle to advance quickly this year. Trappers will begin taking down traps south of Highway 10 starting the week of August 14. Trap takedown north of Highway 10 will begin a week or two later and is expected to take approximately 4-5 weeks. All traps should be removed by the end of September.



## Weeds

As mid-August approaches, many weed species have seeds that are nearing maturity. During surveys this week, both yellow foxtail and wooly cupgrass were observed holding seeds that were almost full size. Neither species had reached maturity, but the process was well on its way. Removing

plants before seed shed can be an effective way of reducing potential future populations.



Yellow foxtail seed head

[www.turfinfo.ncsu.edu](http://www.turfinfo.ncsu.edu)



Wooly cupgrass seeds

<http://cropwatch.unl.edu>

## Forest and Landscape

**Emerald Ash Borer (EAB)** - The Illinois Department of Agriculture and USDA announced the first find of the emerald ash borer (*Agilus planipennis* Fairmaire) in that state on June 8<sup>th</sup> in Kane Co. Since then, the beetle has been detected in two more Illinois communities, Evanston and Wilmette. These finds raise considerable concern for Wisconsin, since these communities are located just 35 miles from the Illinois-Wisconsin border.

Emerald ash borer has killed an estimated 20 million ash trees in Michigan, where the original detection was made in 2002. Infestations have also been detected in Ohio and Indiana. It is believed that EAB originally entered the country in solid wood packing material associated with cargo from Asia, where the beetle is native.

Illinois has announced a plan to control the pest, and most infested areas in that state have been placed under a federal quarantine, preventing movement of wood in or out.

Wisconsin has been preparing for EAB since the first find of the pest in the United States. An EAB Response Plan is in place, with input from DATCP, the Wisconsin DNR, the University of Wisconsin, USDA and many other groups.



Emerald ash borer adult

UW-Extension

To report a suspected EAB infestation in Wisconsin, please call the Pest Survey Hotline at **1-800-462-2803**.

## Exotic Pest of the Week

**Cut-leaved teasel (*Dipsacus laciniatus*)** - When traveling the roadways of southwestern Wisconsin, small patches of cut-leaved teasel can be observed intermittently along roadside ditches. Though known distributions of this exotic invasive are relatively limited in Wisconsin for now, cut-leaved teasel may spread quickly and aggressively, making this a critical time to take action. Non-flowering plants were observed during surveys this week.

Cut-leaved teasel was introduced to North America sometime during the 1700s from Eurasia and Northern Africa. Initially, the introduction served to bring in a tool for combing wool, but when more advanced techniques were developed, teasel found way into dried floral arrangements and home flower gardens. The unique looking flower-head makes the plant an interesting, yet tenacious addition to flower beds.

Both common and cut-leaved teasel are easily identified when the spiny flowerheads are present. The flower head is egg shaped with large, spiny bracts curving up around the flower head. Flowers usually appear white to purple in color. Flowering occurs usually from July to September.

Cut-leaved teasel reproduces by seed and each individual plants can produce over 2000 seeds. Though seeds are usually not spread great distances on their own, mowing along roadside ditches can aid in dispersal. Seeds can be launched through mowing equipment as well as carried to new locations on mowing equipment. For more information on cut-leaved teasel and other invasive plant species, see the Wisconsin DNR Invasives website at [www.dnr.state.wi.us/invasives](http://www.dnr.state.wi.us/invasives).



Cut-leaved teasel

[www.dnr.wi.gov](http://www.dnr.wi.gov)



Common teasel

Gary Fewless

# Weekly Apple Insect Trap Counts (August 4 — August 10, 2006)

County	Site	Date	STLM <sup>1</sup>	RBLR <sup>2</sup>	CM <sup>3</sup>	OBLR <sup>4</sup>	AM red <sup>5</sup>	AM yellow <sup>6</sup>
Bayfield	Erickson	8/3-8/8	2430	0	4	8	0	0
Bayfield	Gellerman	7/21-8/1	9	0	0	0	0	0
Bayfield	Olsen 1	8/4-8/10	1179	0	3	14	0	0
Bayfield	Olsen 2	8/4-8/10	377	0	4	5	0	0
Bayfield	Lobermeier	8/4-8/10	20	3	0	1	0	0
Brown	Oneida	7/31-8/7	20	20	3	16	0	0
Crawford	Gays Mills	8/4-8/10	1475	18	63	12	1	0
Dane	Deerfield	8/4-8/10	138	20	0	1	2*	1
Dane	Stoughton	8/4-8/10	88	68	3	9	2	0
Dodge	Brownsville	8/4-8/10	42	3	4	0	0	0
Fond du Lac	Campbellsport	8/4-8/10	130	5	3	0	0	0
Fond du Lac	Campbellsport	8/4-8/10	0	14	3	10	0	0
Fond du Lac	Rosendale	8/2-8/10	11	15	4	2	1	0
Iowa	Dodgeville	8/3-8/10	164	47	14	12	1	3
Marquette	Montello	7/31-8/6	184	0	0	0	1	0
Marinette	Wauzaukee	8/4-8/10	121	0	3	0	2	0
Ozaukee	Mequon	8/4-8/10	30	0	3.1	0	1.2 bait 1.5 unbait	0
Pierce	Spring Valley	8/4-8/11	67	13	3	1	2.25	1
Racine	Rochester	8/4-8/10	30	27	8.7	2	2.6 unbait**	
Racine	Raymond	8/4-8/10	1098	75	14	7	0	0
Richland	Hill Point	7/18-8/8	1088	60	4	10	0	0
Richland	Richland Center E	8/4-8/10	1260	142	36	18	1	0
Richland	Richland Center W	8/4-8/10	1600	42	11	23	0	0
Sauk	Baraboo	8/4-8/10	70	19	22	18	4	0
Sheboygan	Plymouth	8/4-8/10	1099	11	10	11	8 bait	0
Waukesha	New Berlin		340	6	5	9		

<sup>1</sup> Spotted tentiform leafminer; <sup>2</sup> Redbanded leafroller; <sup>3</sup> Codling moth; <sup>4</sup> Obliquebanded leafroller; <sup>5</sup> Apple maggot red ball trap;

\*9 AM flies on Prima variety and 10 AM flies on Sweet tree

\*\* 11 trap 29 AM flies, high count of 18 AM flies in one trap

## Weekly Black Light Trap Counts

**Black light trap report** - Dinky cutworm counts remained high in both Wausau 267 and Marshfield 226, this week. These counts represent a slight increase from 224 last week in Wausau, and a decline from 354 in Marshfield. Marshfield also had a noteworthy increase in European corn borer numbers this week with 74 captures. Increases in corn borer counts were also recorded in Janesville 72, Sparta 32, Chippewa Falls 23, Manitowoc 15, Wausau 8 and Lancaster 43. Black light catches of corn earworm moths also rose slightly in some locations in past weeks, but do not begin to rival the increases documented in pheromone traps around the state. (See the corn earworm trapping results for more details).

	Date	BCW <sup>1</sup>	CabL <sup>2</sup>	CeL <sup>3</sup>	CE <sup>4</sup>	DCW <sup>5</sup>	ECB <sup>6</sup>	FA <sup>7</sup>	TA <sup>8</sup>	ForL <sup>9</sup>	SCW <sup>10</sup>	VCW <sup>11</sup>	AlfL <sup>12</sup>	WBCW <sup>13</sup>
<b>Southwest</b>														
Reedsburg	8-4 to 8-10	-	-	-	-	-	14	-	-	-	-	-	-	-
Lancaster	8-4 to 8-10	1	0	7	7	7	43	0	7	0	3	0	0	9
<b>South central</b>														
Mazomanie*	8-4 to 8-10	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Arlington	8-4 to 8-10	0	0	2	5	0	17	0	5	0	1	4	0	22
<b>Southeast</b>														
Janesville	8-4 to 8-9	2	1	55	6	2	72	0	9	4	3	0	0	0
East Troy	8-4 to 8-10	0	0	0	0	0	0	5	0	0	0	0	0	18
<b>West central</b>														
Sparta	8-4 to 8-10	1	0	1	1	0	32	0	0	0	2	0	0	17
Chippewa Falls	8-4 to 8-10	0	0	0	0	14	23	0	0	0	0	0	0	0
<b>Central</b>														
Hancock	8-4 to 8-10	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshfield	8-3 to 8-10	2	0	1	39	226	74	0	11	0	9	7	0	7
Wausau	8-4 to 8-10	2	0	2	6	267	8	0	2	14	5	0	0	5
<b>East Central</b>														
Manitowoc	8-3 to 8-9	2	0	3	0	49	15	2	5	0	0	3	0	2

<sup>1</sup> Black Cutworm; <sup>2</sup> Cabbage Looper; <sup>3</sup> Celery Looper; <sup>4</sup> Corn Earworm; <sup>5</sup> Dinky Cutworm; <sup>6</sup> European Corn Borer; <sup>7</sup> Fall Armyworm;

<sup>8</sup> True Armyworm; <sup>9</sup> Forage Looper; <sup>10</sup> Spotted Cutworm; <sup>11</sup> Variegated Cutworm; <sup>12</sup> Alfalfa Looper; <sup>13</sup> Western Bean Cutworm

\* Indicates trap malfunction during the week

## 2006 Soybean Aphid Survey Results (R2-R4)

District	Ave no. soybean aphids per plant 2006 <sup>1</sup>	No. Fields Surveyed 2006	Ave no. soybean aphids per plant 2005	No. Fields Surveyed 2005	Ave no. soybean aphids per plant 2004	No. Fields Surveyed 2004	Ave no. soybean aphids per plant 2003	No. Fields Surveyed 2003
Southwest	55	28	43	46	2	41	149	42
South central	30	45	75	58	12	70	1006	71
Southeast	30	17	89	37	6	35	1268	40
Central	44	12	207	23	37	24	680	23
East central	159	28	124	40	5	47	994	48
West central	100	37	198	34	9	35	633	28
Northwest	56	4	305	16	2	16	566	19
North central	22	8	113	15	7	13	93	10
Northeast	58	4	42	7	20	12	170	8
<b>State Ave.</b>	<b>69</b>	<b>183</b>	<b>108</b>	<b>276</b>	<b>11</b>	<b>293</b>	<b>618</b>	<b>289</b>

<sup>1</sup> Average based on number of soybean aphids on 20 plants examined

## Web Site of the Week

---

### Emerald Ash Borer

A multi-state site with the latest news about the little green beetle that's causing big problems. Images, life cycle, tree ID, quarantine updates, firewood movement prohibitions. EAB central.

<http://www.emeraldashborer.info/>

## Quote of the Week

---

There shall be standard measures of wine,  
ale, and **corn** (the London quarter),  
throughout the kingdom.

-- Article 35, Magna Carta,  
rights ceded by King John, 1215 A.D.



Cut-leaved teasel

[www.dnr.wi.gov](http://www.dnr.wi.gov)

## EXOTIC Pest of the Week

Cut-leaved teasel, *Dipsacus laciniatus* (Linnaeus)